

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/579,174
				<b>Filing Date</b>	11-12-2008
				<b>First Named Inventor</b>	Carl T. Brighton
				<b>Art Unit</b>	3766
<b>Examiner Name</b>					
Sheet	1	of	5	<b>Attorney Docket Number</b>	UPN-4856

### U. S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	2002/0052634 A1	05-02-2002	March	
	2	2003/0211084 A1	11-13-2003	Brighton et al.	
	3	2003/0233124 A1	12-18-2003	Hara et al.	
	4	2004/0006373 A1	01-08-2004	Brighton et al.	
	5	2004/0040233 A1	03-04-2004	Park	
	6	4,430,999 A	02-14-1984	Brighton et al.	
	7	4,442,846 A	04-17-1984	Brighton et al.	
	8	4,467,808 A	08-28-1984	Brighton et al.	
	9	4,467,809 A	08-28-2004	Brighton	
	10	4,487,834 A	12-11-1984	Brighton	
	11	4,506,674 A	03-26-1985	Brighton et al.	
	12	4,509,520 A	04-09-1985	Dugot	
	13	4,535,775 A	08-20-1985	Brighton et al.	
	14	4,549,547 A	10-29-1985	Brighton et al.	
	15	4,600,010 A	07-15-1986	Dugot	
	16	4,683,873 A	08-04-1987	Cadossi et al.	
	17	5,014,699 A	05-14-1991	Pollack et al.	
	18	5,038,797 A	08-13-1991	Batters	
	19	5,269,746 A	12-14-1993	Jacobson	
	20	5,273,033 A	12-28-1993	Hoffman	
	21	5,338,286	08-16-1994	Abbott et al.	
	22	5,374,283 A	12-20-1994	Flick	
	23	5,538,286 A	07-23-1996	Abbott et al.	
	24	5,743,844 A	04-28-1998	Tepper et al.	

Examiner Signature	/Luther Behringer/	Date Considered	02/07/2012
-----------------------	--------------------	--------------------	------------

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/579,174
				<b>Filing Date</b>	11-12-2008
				<b>First Named Inventor</b>	Carl T. Brighton
				<b>Art Unit</b>	3766
<b>Examiner Name</b>					
Sheet	2	of	5	<b>Attorney Docket Number</b>	UPN-4856

### U. S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	25	5,968,527 A	10-19-1999	Litovitz	
	26	6,083,149 A	07-04-2000	Wascher et al.	
	27	6,132,362 A	10-17-2000	Tepper et al.	
	28	6,186,940 B1	02-13-2001	Kirschbaum	
	29	6,261,221 B1	07-17-2001	Tepper et al.	
	30	6,485,963 B1	11-26-2002	Wolf et al.	
	31	6,605,089 B1	08-12-2003	Michelson	
	32	6,747,004 B1	06-18-2004	Tabibzadeh	
	33	6,919,205 B2	07-19-2005	Brighton et al.	
	34	7,022,506 B2	04-04-2006	Brighton et al.	
	35	7,130,692 B2	10-31-2006	Brighton et al.	
	36	7,215,995 B2	05-05-2007	Brighton et al.	
	37	7,374,916 B2	05-20-2008	Brighton et al.	
	38	7,429,471 B2	09-30-2008	Brighton et al.	
	39	7,456,566 B2	12-16-2008	Brighton et al.	

### FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No	Foreign Patent Document Country Code-Number-Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	40	WO 01/62336 A1	08-30-2001	Trustess of the Univ. of Pennsylvania		
	41	WO 95/27533 A1	10-19-1995	Australasian Med Tech		
	42	WO 00/02585 A1	01-20-2000	EMF Therapeutics, Inc.		
	43	WO 2005/070136 A2	08-04-2005	The Trustees of the University of Pennsylvania		

<b>Examiner Signature</b>	/Luther Behringer/	<b>Date Considered</b>	02/07/2012
-------------------------------	--------------------	----------------------------	------------

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/579,174
				<b>Filing Date</b>	11-12-2008
				<b>First Named Inventor</b>	Carl T. Brighton
				<b>Art Unit</b>	3766
				<b>Examiner Name</b>	
Sheet	3	of	5	<b>Attorney Docket Number</b>	UPN-4856

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), Volume-Issue Number(s), publisher, city and/or country where published.	T	
	44	Aaron et al., "Stimulation of Experimental Endochondral Ossification by Low-Energy Pulsing Electromagnetic Fields," J. Bone Miner Res., 1998, 4, 227-233		
	45	Aaron et al., "The Conservative Treatment of Osteonecrosis of the Femoral Head," Clin. Orthop., 1989, 249, 209-218		
	46	Bassett et al., "Effects of Pulsed Electromagnetic Fields on Steinberg Ratings of Femoral Head Osteonecrosis," Clin Orthop., 1989, 246, 172-185		
	47	Bassett et al., "Fundamental and practical aspects of therapeutic uses of pulsed electromagnetic fields (PEMFs)," Crit Rev. Biomed Eng, 1989, 17, 451-529		
	48	Bassett et al., "Pulsing Electromagnetic Field Treatment in Ununited Fractures and Failed Arthrodeses," J. Am. Med. Assoc., 1982, 247, 623-628		
	49	Bassett, "Low Energy Pulsing Electromagnetic Fields Modify Biomedical Processes," BioEssays, 1987, 6, 36-42		
	50	Binder et al., "Pulsed electromagnetic field therapy of persistent rotator cuff tendinitis," Lancet, 1984, 695-698		
	51	Brighton and Pollack, "Treatment of Recalcitrant Non-Union with a Capacitively Coupled Electrical Field," J. Bone Joint Surg., 1985, 67, 577-585		
	52	Brighton and Townsend, "Increased cAMP Production After Short-Term Capacitively Coupled Stimulation in Bovine Growth Plate Chondrocytes," J. Orthop. Res., 1988, 6, 552-558		
	53	Brighton et al., "A Multicenter Study of the Treatment of Non-Union with Constant Direct Current," J. Bone Joint Surg., 1981, 63, 2-13		
	54	Brighton et al., "Treatment of Castration-Induced Osteoporosis by a Capacitively Coupled Electrical Signal in Rat Vertebrae," J. Bone Joint Surg., 1989, 71, 228-236		
	55	Brighton et al., "Treatment of Denervation/Disuse Osteoporosis in the Rat with a Capacitively Coupled Electrical Signal: Effects on Bone Formation and Bone Resorption," J. Orthop. Res., 1988, 6, 676-684		
	56	Brighton, C.T. et al., "Signal transduction in electrically stimulated bone cells," J. Bone Joint Surg., 2001, 83-A(10), 1514-1523		

Examiner Signature	/Luther Behringer/	Date Considered	02/07/2012
--------------------	--------------------	-----------------	------------

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/579,174
				<b>Filing Date</b>	11-12-2008
				<b>First Named Inventor</b>	Carl T. Brighton
				<b>Art Unit</b>	3766
<b>Examiner Name</b>					
Sheet	4	of	5	<b>Attorney Docket Number</b>	UPN-4856

### NON PATENT LITERATURE DOCUMENTS

57	Brighton, C.T., et al., "Prevention and treatment of sciatic denervation disuse osteoporosis in rat tibia with capacitively coupled electrical stimulation," Bone, 1985, 6, 87-97	
58	Brighton, C.T., et al., "Tibial nonunion treated with direct current, capacitive coupling, or bone graft," Clin. of Orthop. and Related Res., 1995, 321, 223-234	
59	Brighton, C.T., et al., "Treatment of nonunion of the tibia with a capacitively coupled electrical field," J. of Trauma, 1984, 24(2), 153-155	
60	Brighton, Pollack et al., "Fracture Healing in the Rabbit Fibula When Subjected to Various Capacitively Coupled Electrical Fields," J. Orthop. Res., 1985, 3, 331-340	
61	Brighton, Pollack et al., "In-Vitro Bone-Cell Response to a Capacitively Coupled Electrical Field," Clin. Orthop. and Related Research, 1992, 285, 255-262	
62	Carter et al., "Field Distributions in Vertebral Bodies of the Rat During Electrical Stimulation: A Parametric Study," IEEE Transactions on Biomedical Engineering, 1989, 36, 333-345	
63	Chang, W.H., et al., "Enhancement of fracture healing by specific pulsed capacitively-coupled electric field stimulation," Frontiers Med. Biol. Engng., 1991, 3(1), 57-64	
64	Goodman, R. et al., "Exposure of salivary gland cells to low-frequency electromagnetic fields alters polypeptide synthesis," Proc. Natl. Acad. Sci., 1988, 85, 3928-3932	
65	Goodwin et al., "A Double-Blind Study of Capacitively Coupled Electrical Stimulation as an Adjunct to Lumbar Spinal Fusions," Spine, 1999, 24, 1349-1355	
66	Grodzinsky, "Electromechanical and Physicochemical Properties of Connective Tissue," Crit. Rev. Biomed. Eng., 1983, 9(2), 133-198	
67	Harrison et al., "Use of Pulsed Electromagnetic Fields in Perthes Disease: Report of a Pilot Study," J. Pediatr. Orthop., 1984, 4, 579-584	
68	Jones et al., "PEMF effects on differentiation and division in murine melanoma cells are mediated indirectly through cAMP," Trans. BRAGS, 1986, 6, 51	
69	Lorich et al., "Biochemical Pathway Mediating the Response of Bone Cells to Capacitive Coupling," Clin. Orthop. Related Res., 1998, 350, 246-256	
70	Massardo et al., "Osteoarthritis of the knee joint: an eight year prospective study," Ann. Rheum Dis., 1989, 48, 893-897	

Examiner Signature	/Luther Behringer/	Date Considered	02/07/2012
--------------------	--------------------	-----------------	------------

Substitute for 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				<b>Application Number</b>	10/579,174
				<b>Filing Date</b>	11-12-2008
				<b>First Named Inventor</b>	Carl T. Brighton
				<b>Art Unit</b>	3766
<b>Examiner Name</b>					
Sheet	5	of	5	<b>Attorney Docket Number</b>	UPN-4856

### NON PATENT LITERATURE DOCUMENTS

71	Mooney, "A Randomized Double-Blind Perspective Study of the Efficacy of Pulsed Electromagnetic Fields for Interbody Lumbar Fusions," Spine, 1990, 15, 708-712	
72	Norton et al., "Pulsed Electromagnetic Fields Alter Phenotypic Expression in Chondroblasts in Tissue Culture," J. Orthop. Res., 1988, 6, 685-689	
73	Pienkowski, D. et al., "Low-power electromagnetic stimulation of osteotomized rabbit fibulae," J. Bone Joint Surg., 1994, 76-A(4), 489-501	
74	Rodan et al., "DNA Synthesis in Cartilage Cells Is Stimulated by Oscillating Electric Fields," Science, 1978, 199, 690-692	
75	Ryaby et al., "Pulsing electromagnetic fields affect the phosphorylation and expression of oncogene proteins," Trans. BRAGS, 1986, 6, 78	
76	Ryaby, J.T. et al., "The effect of electromagnetic fields on protein phosphorylation and synthesis in murine-melanoma cells," Trans. BRAGS, 1986, 6, 32	
77	Wang et al., "The increased level of PDGF-A contributes to the increased proliferation induced by mechanical stimulation in osteoblastic cells," Biochem Mol. Biol. Int., 1997, 43, 339-346	
78	Wang, W. et al., "Up-regulation of chondrocyte matrix genes and products by electric fields," Clin. Orthop. Related Res., 2004, 427S, S163-S173	
79	Zhuang et al., "Mechanical Strain-Induced Proliferation of Osteoblastic Cells Parallels Increased TGF- $\beta$ 1 mRNA," Biochem. Biophys. Res. Commun., 1996, 229, 449-453	
80	Zhuang et al., "Electrical Stimulation Induces the Level of TGF- $\beta$ 1 mRNA in Osteoblastic Cells by a Mechanism Involving Calcium/Calmodulin Pathway," Biochem. Biophys. Res. Commun., 1997, 237, 225-229	

<b>Examiner Signature</b>	/Luther Behringer/	<b>Date Considered</b>	02/07/2012
---------------------------	--------------------	------------------------	------------